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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,561	03/30/2004	Markus Aholainen	NOKM.094PA	4117

7590 01/24/2008
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EXAMINER	
YUEN, KAN	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
01/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,561

Applicant(s)

AHOLAINEN, MARKUS

Examiner

Kan Yuen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/3/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments, see remark page 10, line 10, filed 12/3/2007, with respect to the rejection(s) of claim(s) 1-27 under 102 and 103 rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Simpson-Young et al. (Pat No.: 7191236).

Claim Rejections - 35 USC § 103

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 14, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (Pat No.: 6130917), In view of Simpson-Young et al. (Pat No.: 7191236).

For claim 1, Monroe disclosed the method of determining the protocol of a service discovery request received from a client (see column 2, lines 26-50, and see fig. 1). As shown in the reference, one end of the user's protocol is determined; translating the protocol of the service discovery request into a service discovery protocol used by a service registry, the translated service discovery request being used to discover a service provider of the service requested (see column 2, lines 55-67, and see column 3, lines 1-10, and see fig. 1). In the reference, both end users' protocol will be compared to detect incompatibilities, if incompatibilities detected, then conversion begins. Here, we can interpret that the service discovery request is the first protocol used by one end, and the service discovery protocol can be a compatible protocol used by both ends. All users' protocols are stored into memory for future references. Therefore we can interpret the memory as a service registry; detecting incompatibilities between the client and the service provider (Monroe see column 2, lines 45-55); The source and destination data format is determined; and translating the service provided to the client by the service provider in response to the detected incompatibilities (see column 3, lines 1-25). Finally, the system will start the conversion upon the detection of incompatibilities.

However, Monroe did not disclose the method of translating the protocol of the service discovery request into a service discovery protocol, and using the protocol to discover a service provider of the service requested. Simpson-Young et al. from the same or similar fields of endeavor teaches the method of translating the protocol of the service discovery request into a service discovery protocol, and using the protocol to

discover a service provider of the service requested (Simpson-Young et al. see column 8, lines 15-67, column 12, lines 20-67, column 13, lines 1-45, see fig. 2). Each entity has a different profile and Disc/Announce means for searching and standardizing different services. As shown in fig. 2, once all the entities 102-108 have discovered each other, the profiles of each entity will be standardized to be capable of at least a minimum degree of communication, and therefore for using the standardization, the camera 102 can communicate with low resolution printer 104 across the network using miniSLP protocol. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Simpson-Young et al. in the network of Monroe. The motivation for using the method as taught by Simpson-Young et al. in the network of Monroe being that it provides communication flexibility.

Regarding to claim 2, Monroe also disclosed the method of translating the protocol includes selecting one of a plurality of service discovery interfaces that are compatible with the service registry (see column 5, lines 58-67, and fig. 3, database 16). As shown the system selects a compatible data format from the database 16.

Regarding to claims 14, and 17 Monroe also disclosed the method of a service requestor coupled to the service translation system and adapted to submit a service request using a first service discovery protocol (see column 4, lines 26-50, and see fig. 1). As shown the source or the service requestor originates a data format, which can be considered as the first protocol; a service translation proxy coupled to the service requestor and adapted to translate the first service discovery protocol of the service

request into a second service protocol (see column 2, lines 27-37, and see column 4, lines 45-60, and see fig. 1). As shown, both end users' protocol will be compared to detect incompatibilities, if incompatibilities detected, then conversion begins, and since conversion can be done at either end; and a service provider coupled to the service translation system and adapted to provide the service requested, wherein the service translation proxy is further adapted to translate the service provided into a format that is compatible with the service requester (see column 4, lines 45-60).

However, Monroe did not disclose the method of translate the service provided into a format that is compatible with the service requester. Simpson-Young et al. disclosed the method of translate the service provided into a format that is compatible with the service requester (Simpson-Young et al. see column 8, lines 15-67, column 12, lines 20-67, column 13, lines 1-45, see fig. 2). Each entity has a different profile and Disc/Announce means for searching and standardizing different services. As shown in fig. 2, once all the entities 102-108 have discovered each other, the profiles of each entity will be standardized to be capable of at least a minimum degree of communication, and therefore for using the standardization, the camera 102 can communication with low resolution printer 104 across the network using miniSLP protocol. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Simpson-Young et al. in the network of Monroe. The motivation for using the method as taught by Simpson-Young et al. in the network of Monroe being that it provides communication flexibility.

Regarding to claim 18, Monroe disclosed the method of means for receiving the service provided using a first transport protocol (see column 4, lines 26-50, and see fig. 1). As shown the source or the service requestor originates a data format, which can be considered as the first protocol; and means for providing the service provided using a second transport protocol (see column 4, lines 45-60). After the conversion, the end users are using a compatible data format, which can be considered as the second protocol.

Regarding to claim 19, same rejection is applied as to claim 17, because claim 17 is a method claim, and 19 is a system claim.

Regarding to claim 20, Monroe disclosed the method of locating a service provider comprises issuing the translated service request to a service registry (see column 5, lines 58-67, and fig. 3, database 16). As shown the system selects a compatible data format from the database 16.

Regarding to claim 21, Monroe also disclosed the method of locating a service provider comprises forwarding the service request to another service translation proxy located within the network (see column 5, lines 14-55, and fig. 3). As shown, the originator's protocol is examined to determine compatibilities, if detects incompatible, the protocol is be transmitted to database 16 to select the appropriate protocol to comply with an endpoint.

5. Claims 3-13, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (Pat No.: 6130917), In view of Simpson-Young et al. (Pat No.: 7191236),

as applied to claim 2 above, and further in view of Klaghofer et al. (Pub No.: 2003/0048855).

For claim 3, Monroe, and Simpson-Young et al. disclosed all the subject matter of the claimed invention with the exception of the number of service discovery interfaces is programmable. Klaghofer et al. from the same or similar fields of endeavor teaches the method of the number of service discovery interfaces is programmable (see paragraph 0021, lines 1-6). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Klaghofer et al. in the network of Monroe, and Simpson-Young et al. The motivation for using the network as taught by Klaghofer et al. in the network of Monroe and Simpson-Young et al. being that it provides various programmable functions in devices to perform conversion.

Regarding to claim 4, Monroe disclosed the method of detecting the incompatibilities comprises analyzing session descriptions (see column 4, lines 45-55). In the reference, the system selects the proper conversion technique based on the detection incompatibilities, which can be interpreted as analyzing session description. However, Monroe did not disclose the method of session descriptions contained within Session Initiation Protocol (SIP) messages exchanged between the client and the service provider. Klaghofer et al. also disclosed the method of session descriptions contained within Session Initiation Protocol (SIP) messages exchanged between the client and the service provider (see paragraph 0023, lines 1-10). In the reference, the system is using multimedia communication according to a SIP standard. Thus, it would

have been obvious to the person or ordinary skill in the art at the time of the invention to use the method as taught by Klaghofer et al. in the network of Monroe. The motivation for using the network as taught by Klaghofer et al. in the network of Monroe being that it provides one standard protocol even with differently furnished coding and decoding methods.

Regarding to claim 5, Monroe disclosed the method of the session descriptions transmitted by the client reflects the capabilities of the client (see column 4, lines 45-55). In the reference, the system selects the proper conversion technique based on the detection of incompatibilities, which can be interpreted as analyzing session description.

Regarding to claim 6, Monroe disclosed the method of the capabilities of the client include media session capabilities (see column 4, lines 27-40 and see fig. 1). The reference supports audio signal, which is the media session.

Regarding to claim 7, Monroe disclosed the method of the session descriptions transmitted by the service provider reflects the capabilities of the service provider (see column 4, lines 45-55, and see fig. 1). In the reference, the system selects the proper conversion technique based on the detection of incompatibilities.

Regarding to claim 8, Monroe disclosed the method of the capabilities of the service provider include media session capabilities (see column 4, lines 27-40). The reference supports audio signal, which is the media session.

Regarding to claim 9, Monroe disclosed the method of translating the service provided comprises translating media received from the service provider into a format compatible with the media session capabilities of the client (see column 4, lines 27-40).

The reference originates an audio signal from the source, and since the system can initiates conversion at the source or destination, so therefore in this case, the system converts the destination data format to comply with the audio signal generated from the source.

Regarding to claim 10, Monroe disclosed the method of modifying the session descriptions received from the client to match the session descriptions received from the service provider; and transmitting the modified session descriptions to the service provider (see column 2, lines 27-50, and see column 4, lines 27-67). As shown in the reference, the conversion can be done at source or destination endpoints, depending on application requirement.

Regarding to claim 11, Monroe disclosed the method of modifying the session descriptions received from the service provider to match the session descriptions received from the client; and transmitting the modified session descriptions to the client (see column 2, lines 27-50, see column 4, lines 45-55). In the reference, the system selects the proper conversion technique based on the detection of incompatibilities, which can be interpreted as analyzing session description. As shown in the reference, the system can initiates conversion at the source or destination

Regarding to claim 12, Monroe disclosed the method of translating the service provided comprises: receiving messages from the service provider using a first transport protocol; and transmitting the messages received from the service provider to the client using a second transport protocol (see column 2, lines 27-50). As shown, the source originates a data format, which is the first protocol, and then conversion takes place at

the source to change the data format at the source to comply with the destination data format, which is the second protocol.

Regarding to claim 13, Monroe disclosed the method of translating the service provided comprises: receiving messages from the client using the second transport protocol; and transmitting the messages received from the client to the service provider using the first transport protocol (see column 2, lines 27-50). As shown, the source originates a data format, which is the first protocol, and then conversion takes place at the destination to change the data format at the destination to comply with the source data format, which is the second protocol.

Regarding to claim 15, Monroe disclosed the method of the service translation proxy comprises a programmable number of service discovery protocol interfaces (see paragraph 0021, lines 1-6). Thus, it would have been obvious to the person or ordinary skill in the art at the time of the invention to use the method as taught by Klaghofer et al. in the network of Monroe. The motivation for using the network as taught by Klaghofer et al. in the network of Monroe being that it provides various programmable functions in devices to perform conversion.

Regarding to claim 16, Monroe disclosed the method of a service registry coupled to receive the service request in the second protocol, wherein the service request is transmitted by one of the programmable number of service discovery protocol interfaces (see column 2, lines 55-67, and see column 3, lines 1-10). All users' protocols are stored into memory for future references. Therefore we can interpret the memory as a service registry.

6. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson-Young et al. (Pat No.: 7191236), in view of Klaghofer et al. (Pub No.: 2003/0048855).

For claim 22, Simpson-Young et al. disclosed the method of a plurality of home devices adapted to exchange media content in a first format via a first service discovery protocol; at least one mobile device adapted to exchange media content in a second format via a second service discovery protocol (Simpson-Young et al. see column 8, lines 15-67, column 12, lines 20-67, column 13, lines 1-45, see fig. 2). Each entity has a different profile and Disc/Announce means for searching and standardizing different services, wherein the searching mean may being using a protocol for discovery services. As shown in fig. 2, once all the entities 102-108 have discovered each other, the profiles of each entity will be standardized to be capable of at least a minimum degree of communication, and therefore for using the standardization, the camera 102 can communication with low resolution printer 104 across the network using miniSLP protocol. However, Simpson-Young et al. did not disclose the method of a service translation proxy coupled to the plurality of home devices and the at least one mobile device, wherein the service translation proxy is adapted to translate the media exchanged between the plurality of home devices and the at least one mobile device in response to their respective capabilities. Klaghofer et al. disclosed the method of a service translation proxy coupled to the plurality of home devices and the at least one

mobile device, wherein the service translation proxy is adapted to translate the media exchanged between the plurality of home devices and the at least one mobile device in response to their respective capabilities (see paragraph 0039, lines 1-10, and paragraph 0040, lines 1-5, and see fig. 3). In the reference, a mobile radio device produces a connection to the base station 2, and the base station 2 forward the connection to GSM gateway 3, and the GSM gateway 3 converts the signals to IP packets and forward it to terminal device 5. Therefore, the IP packet can be considered the second format. Thus, it would have been obvious to the person or ordinary skill in the art at the time of the invention to use the method as taught by Klaghofer et al. in the network of Simpson-Young et al. The motivation for using the network as taught by Klaghofer et al. in the network of Simpson-Young et al. being that it provides one standard protocol even with differently furnished coding and decoding methods.

Regarding to claim 23, Klaghofer et al. disclosed the method of the service translation proxy is coupled to the plurality of home devices and the at least one mobile device via a proximity connection (see paragraph 0039, lines 1-10, and paragraph 0040, lines 1-5, and see fig. 3). In the reference, a mobile radio device produces a connection to the base station 2, where the connection can be proximity connection.

Regarding to claim 24, Klaghofer et al. disclosed the method of the proximity connection includes a Bluetooth connection (see paragraph 0039, lines 1-10, and paragraph 0040, lines 1-5, and see fig. 3). In the reference, a mobile radio device produces a connection to the base station 2, where the connection can be wireless connection.

Regarding claim 25, Simpson-Young et al. disclosed the method of evaluating differences in media capabilities between the mobile device and the home device via the respective first and second service discovery protocols and translating media exchanged between the mobile device and the home device in response to the media capability differences between the mobile device and the home device (Simpson-Young et al. see column 8, lines 15-67, column 12, lines 20-67, column 13, lines 1-45, see fig. 2). Each entity has a different profile and Disc/Announce means for searching and standardizing different services. As shown in fig. 2, once all the entities 102-108 have discovered each other, the profiles of each entity will be standardized to be capable of at least a minimum degree of communication, and therefore for using the standardization, the camera 102 can communication with low resolution printer 104 across the network using miniSLP protocol. However, Simpson-Young et al. did not disclose the method of establishing the mobile device and the home device as entities of a wireless home network, wherein the mobile device communicates via a first service discovery protocol and the second device communicates via a second service discovery protocol. Klaghofer et al. disclosed the method of establishing the mobile device and the home device as entities of a wireless home network, wherein the mobile device communicates via a first service discovery protocol and the second device communicates via a second service discovery protocol (Klaghofer et al. see paragraph 0039, lines 1-10, and paragraph 0040, lines 1-5, and see fig. 3). In the reference, a mobile radio device 1 communicates with control device 4, and terminal device 5 at the VoIP network. The units 4 and 5 can be considered as home devices. Thus, it would

have been obvious to the person or ordinary skill in the art at the time of the invention to use the method as taught by Klaghofer et al. in the network of Simpson-Young et al. The motivation for using the network as taught by Klaghofer et al. in the network of Simpson-Young et al. being that it provides one standard protocol even with differently furnished coding and decoding methods.

Regarding to claim 26, Simpson-Young et al. disclosed the method of automatically determining the media format capability of the mobile device using a service translation proxy and automatically determining the media format capability of the home device using the service translation proxy (see column 1, lines 50-67, and column 2, lines 1-10).

Regarding to claim 27, Klaghofer et al. disclosed the method of translating the media format received from the home device into media format that is compatible with the media format capability of the mobile device and translating the media format received from the mobile device into media format that is compatible with the media format capability of the home device (Klaghofer et al. see paragraph 0039, lines 1-10, and paragraph 0040, lines 1-5, and see fig. 3). As shown in the drawing, the home device unit 5 in the VoIP network transmit IP packet to the GSM gateway 3, and the gateway will convert the IP packet to wireless connection to mobile 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kan Yuen whose telephone number is 571-270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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